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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/619,190	07/15/2003	Pasqua Colaianna	108910-00110	4947

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EXAMINER

HU, HENRY S

ART UNIT	PAPER NUMBER
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1713

DATE MAILED: 06/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/619,190

Applicant(s)

COLAIANNA ET AL.

Examiner

Henry S. Hu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on RCE of April 14, 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

*de*

### **DETAILED ACTION**

1. This Office Action is in response to RCE request filed on April 14, 2005 and its Amendment after Final filed on March 14, 2005. In view of the amendment, parent **Claim 1** was amended to include the features that copolymers of TFE/FMVE have a melt flow index from Claim 2. **Claims 1-7 are now pending.** An action follows.

#### ***Response to Argument***

2. Applicant's argument filed on April 14, 2005 has been fully considered but they are not persuasive. The focal arguments related to the patentability will be addressed as follows: In view of the Applicants' argument on pages 5-8 of Remarks, 102(b) for Claim 1 and 102(b)/103(a) rejection for Claims 2 and 6-7 are thereby combined to become **102(b)/103(a) rejection** due to the amendment as such copolymers of TFE/FMVE have such a melt flow index from Claim 2, while 103(a) rejection for Claims 3-5 is sustained with the same ground of rejection.

#### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. *The limitation of parent **Claim 1** of the present invention relates to **copolymers formed by TFE and FMVE, having Melt Flow Index (ASTM D 1238) from 8 g/10 min to 50 g/10 min, and having the following composition: (a) FMVE in per cent by moles from 3.7% to 5.2%, (b) the % TFE moles being the complement to 100% of the FMVE moles. See other limitations of dependent **Claims 2-7.*****

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6. Claims 1-2 and 6-7 are rejected under 35 U.S.C. 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Pucciariello (Journal of Applied Polymer Science, Vol. 64, 407-409 (1997)) for the reasons set forth in **paragraphs 4-6 of office action dated 12-14-2004 as well as the discussion below.**

7. Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pucciariello (Journal of Applied Polymer Science, Vol. 64, 407-409 (1997)) in view of Abulseme et al. (US 5,463,006) for the reasons set forth in **paragraph 7 of office action dated 12-14-2004 as well as the discussion below.**

8. **Applicants:** Applicants have claimed in **Claim 1** an unexpected way of obtaining dipolymers of **TFE and FMVE (3.7-5.2 mol%)**, having the claimed Melt Flow Index by ASTM D 1238. With respect to two rejections for **Claims 1** as well as **Claims 2 and 6-7** both involving the Pucciariello reference, the Applicants allege that the products of present application are not thermoprocessable, and also do not inherently possess properties similar to those by Pucciariello. The Applicants further allege that DSC data by Pucciariello is only related to small samples about 10 +/- 0.5 mg and would thereby not provide any information for melt processability especially in the melt molding or melt extruding properties. Additionally, MFI of the polymers depend on molecular weight and is not dependent from comonomeric composition. Furthermore, Pucciariello's copolymers are not specifically prepared by using chain transfer agents to control molecular weight for desired property.

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With respect to 10(a) rejection over Pucciariello/Abulseme for dependent **Claims 3-5**, the Applicants allege that secondary reference Abulseme would not fix the deficiency of Pucciariello since he has only described terpolymers, which in nature are not equivalent to the claimed dipolymers. As a matter of fact, the only dipolymer is described as a comparative example with worst result. Therefore, the above-mentioned prior art, in combination or alone, fails to teach or suggest such a specific copolymer of **TFE and FMVE (3.7-5.2 mol%)**.

9. **Examiner:** In view of the fact that parent **Claim 1** has been further amended to require the limitation of Melt Flow Index by ASTM D 1238 from Claim 2, the previous 102(b) for Claim 1 and 102 (b)/103(a) for Claims 2 and 6-7 are thereby combined to become a 102(b)/103(a) rejection. Although MFI is not specifically disclosed, Pucciariello has already disclosed the claimed copolymer of **TFE and FMVE (4.0 mol%)**. Please pay attention to that the 4.0 mol% is within and **reading on** the claimed range of **3.7-5.2 mol%**. The examiner recognizes that Pucciariello's copolymer may have a higher molecular weight (which would induce a lower MFI) since chain transfer agent is **not** used or suggested in the polymerization process as pointed out by the Applicants. The key point is that all the properties recited by the Applicants on pages 5-6 of Remarks are not included in Claim 1 as limitation(s) at all. The Examiner cannot and would not read the specification into the claim.

In a very close examination, only a small description can be found on the preparation of Pucciariello's copolymer (see page 407 on the materials section; also see second paragraph of Introduction as well as references # 1 and 2 cited therein). Therefore, **it would be premature**

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and unfair to conclude with the Applicants' statement as "no chain transfer agent is particularly used in the polymerization by Pucciariello". It would be obvious to use such a chain transfer agent, which is commonly used in the art to control the molecular weight to the desired value. It is also noted that melting point (see lines 12-15 of Introduction section) has been also disclosed in addition to DSC data.

10. The Examiner has recognized that when chain transfer agent is not used, such obtained polymer may have a higher molecular weight in polymer and would thereby induce a lower MFI. However, the molecular weight of polymers may also depend on many other factors such as impurities, concentration, temperature and pressure.

Regarding the issue on "**unexpected results**" as compared to those of Pucciariello et al., it does not change the status of the rejection. According to MPEP, **unexpected results** "**cannot**" form a basis for rebutting an anticipation rejection under 35 USC "102". In re Malgari, 499 F.2d 1297, 1302, 182 USPQ 549. To be more specific, **the issue of the Applicants's alleged superior finding from present application in comparing with Pucciariello's copolymer is not a limitation of Claim 1.** Since Claim 1 is only amended to clarify the MFI statement, it is thereby still carrying the same scope of original limitations. The examiner can only read Claim 1 as a composition using such a comonomer's ratio. Therefore, the same rational recited in the rejection of previous Claims 1-7 can be still applied to reject Claims 1-7.

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11. In other close examination on the key argument as “**terpolymer is not dipolymer**” regarding 103(a) rejection over Pucciariello/Abulseme for dependent **Claims 3-5**, one would still read the teaching of dipolymer as a **fact** even it is from comparative examples. With respect to “**worst result being obtained**”, it may be due to a different process or from the additional component as additive. Therefore, 103(a) rejection over Pucciariello/Abulseme is sustained.

### ***Conclusion***

12. Applicant's amendment **necessitated the new ground(s) of rejection presented in this Office action**. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

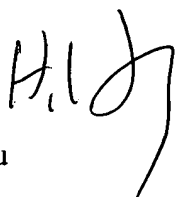


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13. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Dr. Henry S. Hu whose telephone number is **(571) 272-1103**. The examiner can be reached on Monday through Friday from 9:00 AM –5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu, can be reached on (571) 272-1114. The fax number for the organization where this application or proceeding is assigned is (703) 872-9306 for all regular communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Henry S. Hu

Patent Examiner, art unit 1713, USPTO

June 10, 2005



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